



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,987	08/29/2003	Joseph E. Harter JR.	DP-309/898	2984
22851 7590 08/29/2008 DELPHI TECHNOLOGIES, INC. M/C 480-410-202 PO BOX 5052 TROY, MI 48007			EXAMINER ANYIKIRE, CHIKAODILI E	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 08/29/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/652,987

Applicant(s)

HARTER ET AL.

Examiner

CHIKAODILI E. ANYIKIRE

Art Unit

2621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

1. This Office Action is responsive to application number (10/652987) filed on May 12, 2004. Claims 1-7 are pending and have been examined.

Response to Arguments

2. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 1-5 rejected under 35 U.S.C. 103(a) as being unpatentable over Bradley (US 5,771,071) in view of Hayakawa (US 6,130,993).

As per **claim 1**, Bradley et al discloses an imaging system (Fig 2, 44), comprising:

an interlaced imaging device (Fig 2, 44; col 5 line 45) that produces video data from an aperture field (Fig 2, element 46; col 5 lines 45-46; the image plane presenting the aperture field) during a data acquisition interval in response to a data acquisition control signal (col 6 lines 13-15, col 7 lines 5-9, col 10 lines 52-56);

a mirrored shaft (Fig 5, 114; Col 9 Ln 53-67), the mirrored shaft including two or more mirror elements affixed to said shaft, said mirror elements being mutually spaced along the axis of said shaft, and diversely angled with respect to the aperture field of said imaging device to define different predefined views of a scene (col 7 lines 3-14; Bradley discloses applying two different mirrors that are part of the mirrored shaft (Fig 2 element 114) that both have different function and different views of the scene based by their position along the shaft);

drive means including an electric motor (Fig 5, 118) for producing linear displacement of said mirrored shaft (Fig 5, 114) along said axis to change the view presented to said imaging device (Col 10 Ln 1-27) as the different diversely angled mirror elements are brought into alignment with the aperture field of said imaging device (col 7 lines 3-14; Bradley discloses different mirrors that correspond to image paths that are connected to the image plane (Fig 2 element 46)); and

control means for controlling said electric motor in response to a data acquisition control signal of the imaging device (Col 10 Ln 52-56) such that interlaced video data

produced by said imaging device in a series of successive data acquisition intervals pertains to two or more different views (Col 12 Ln 1-16; the Bradley discloses two separate flashest for different fields, which relates to different views and these images are captured during different points of time depending on the control system).

However, Bradley et al does not explicitly teach a mirrored shaft that is axially displaceable for presenting different views to said imaging device.

In the same field of endeavor, Hayakawa teach a mirrored shaft (Fig 2, 26) that is axially displaceable for presenting different views to said imaging device (Col 8 Ln 50-55 and 62-67).

Therefore, it would have been obvious for one having skill in the art at the time of the invention to modify the invention of Bradley in view of Hayakawa. The advantage is stabilizing images formed on a film surface when the image shakes due to unstable movement of the camera.

As per **claim 2**, Bradley et al discloses the imaging system of claim 1, wherein said data acquisition control signal is a vertical synchronization control signal that coordinates readout of said video data (Col 11 Ln 42-58 and Col 12 Ln 12-16).

As per **claim 3**, Bradley et al discloses the imaging system of claim 2, wherein said mirrored shaft (Fig 2, 114) includes first and second linearly separated mirrors (Fig 2, 64, 86, and 110) that are alternately in position with respect to said imaging device during successive data acquisition periods of said imaging device (Col 9 Ln 53-67; the prior art describes two different mirrors that surrounds an axial).

As per **claim 4**, Bradley et al discloses the imaging system of claim 1, wherein said drive means includes a rotary cam mechanism driven by said electric motor (Fig 5, 118) and a connecting arm coupling said cam mechanism to said mirrored shaft (Fig 5, 114, Col 9 Ln 53-67).

As per **claim 5**, Bradley et al discloses the imaging system of claim 4, wherein said control means continuously drives said electric motor (Fig 5, 118) at a speed that is in synchronism with said data acquisition control signal (Col 10 Ln 52-67; the prior art discloses the actuation of the motor and also describes the synchronization of information which shows the control over the electric motor).

As per **claim 6**, Bradley discloses the imaging system of claim 1, where:

said mirror elements are horizontally angled with respect to said aperture field to define diverse horizontally angled views of said scene as the different diversely angled mirror elements are brought into alignment with the aperture field of said imaging device (col 6 lines 12-14 and col 7 lines 3-16).

As per **claim 7**, Bradley discloses the imaging system of claim 1, where:

said mirror elements are vertically angled with respect to said aperture field to define diverse vertically angled views of said scene as the different diversely angled mirror elements are brought into alignment with the aperture field of said imaging device (col 6 lines 12-14 and col 7 lines 3-16).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIKAODILI E. ANYIKIRE whose telephone number is (571)270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272 - 7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621
/Chikaodili Anyikire/
Patent Examiner, AU 2621